CLAIMS

What is claimed is:

1. A method of resampling a data sequence, comprising:

(a) providing filter coefficients according to an input resampling ratio U/D where U and D are positive integers, said coefficients grouped into U sub-filters according to phase and corresponding to a data access block;

(b) for each of a plurality of architecture kernels:

(i) provide a step per group of H of said sub-filters from a first set of integers about H*D/U where H is the height of said architecture kernel;

(ii) for each of said steps from said first set, find a length for said sub-filters according to an access coverage chart for said data access block;

(c) using the architecture kernel and the step corresponding to a minimum of said lengths of step (b)(ii) to filter an input data sequence.

2. The method of claim 1, wherein:

(a) said filter coefficients of step (a) of claim 1 are samples of a windowed sinc function.

3. The method of claim 1, wherein:

(a) said input data sequence is an image; and

(b) said filter of step (c) of claim 1 is a horizontal resampling.

4. A digital camera zoom, comprising:

(a) an input for zoom selection; and

(b) parallel processing circuitry coupled to said zoom selection input and operable to resample an image by

(1) providing filter coefficients according to a resampling ratio dependent upon an input zoom selection, said coefficients grouped into sub-filters according to filter phase and corresponding to a data access block;

(2) for each of a plurality of architecture kernels of said parallel processing circuitry (i) provide a step per group of said sub-filters from a first set of integers corresponding to the height of said architecture kernel and said resampling ratio, (ii) for each of said steps from said first set, find a length for said sub-filters according to an access coverage chart for said data access block; and

(3) using the architecture kernel and the step corresponding to a minimum of said lengths of step (b)(ii) to filter said image.